REMARKS

Request for Continued Examination

Applicants request continued examination of the instant application under 37 C.F.R. 1.114.

Personal Interview

Applicants gratefully acknowledge the personal interview granted to the undersigned and Mr. Christopher Slavinsky with Examiner Henley on July 27, 2005.

Claim Amendments

Claims 12, 18, 24 and 27 are amended to more particularly define the methods of the present invention. No new matter has been added. Upon entry of the amendments, claims 12-14, 16, 18-20, 22, 24-25, 27-28, and 30-35 will remain pending in the application.

Rejection Under 35 U.S.C. § 103

Claims 12-14, 16, 18-20, 22, 24-25, 27-28 and 30-35 stand rejected under 35 U.S.C. §103(a) as being obvious over Breivik et al. (U.S. Pat. No. 5,502,077) in view of Harrison's Principles of Internal Medicine. Applicants submit that the rejection is traversed because the Examiner has failed to establish a *prima facie* case of obviousness.

In order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the teachings of prior art references; and the references, when combined, must teach all of the claim limitations. See MPEP 2143. As defined in amended claims 12, 18, 24 and 27, the present invention is directed to the use of essential fatty acids with a high content in EPA-ethyl ester, DHA-ethyl ester or a high concentration mixture of EPA-ethyl ester and DHA-ethyl ester for reducing the reoccurrence of adverse cardiovascular events in a patient who has survived a myocardial infarction. As further described below, neither of the cited references remotely teaches or suggests the secondary prevention of adverse cardiovascular events in a patient who has survived a myocardial infarction. Thus, Applicants

submit that the cited references do not provide the necessary motivation or suggestion to combine the reference teachings; and, even if combined, the references do not teach all of the claim limitations of the present invention.

As acknowledged by the Examiner, the principal reference, Breivik et al., differs from the present invention in that Breivik et al. does not teach a patient who had suffered from a myocardial infarction or the secondary prevention of myocardial infarction. In particular, Breivik et al. is limited to the study of hypertension, hypertriglyceridemia and high coagulation factor VII phospholipids complex activity in otherwise healthy patients having undetected moderate hypertension without previous cardiac illness or cardiac drug use. See Col. 6, lines 20-37 of the reference. Therefore, Breivik et al. cannot be said to remotely teach or suggest the secondary prevention of adverse cardiovascular events in patients who have survived a myocardial infarction. Accordingly, Breivik et al. do not provide the required motivation or suggestion for one skilled in the art to practice the present invention for reducing the reoccurrence of adverse cardiovascular events in a patient who has survived a myocardial infarction as required by the amended claims.

Further, the deficiencies of the principal reference cannot be overcome by resorting to the teachings of Harrison's Principles of Internal Medicine. Chapter 202 of Harrison's provides an overview of myocardial infarction including relevant risk factors for developing myocardial infarction, symptoms and laboratory tests for identifying a patient suffering from myocardial infarction, methods for treating patients suffering from myocardial infarction, and the management of patients postinfarction. It is important to note that nothing in the cited reference describes the administration of omega-3 fatty acids for any indication related to myocardial infarction. Thus, Applicants submit that Harrison's does not provide the necessary motivation or suggestion to combine the reference teachings; and, even if combined, the references do not teach all of the claim limitations of the present invention such that a *prima facie* case of obviousness cannot be established.

The Examiner contends that the invention is nonetheless obvious because the cardiovascular risk factors identified and effectively treated by Breivik et al. include those risk factors known to be associated with myocardial infarction. In particular, the Examiner cites

Harrison's at page 1066, Col. 1 wherein it is stated that myocardial infarction is a result of thrombotic occlusion of a coronary artery resulting from a vascular injury "produced or facilitated by factors such as cigarette smoking, hypertension and lipid accumulation."

Applicants disagree with the Examiner's reasoning. The paragraph cited by the Examiner relates to the development of myocardial infarction in the general population rather than the secondary prevention of adverse cardiovascular events in a patient who has survived a myocardial infarction. In contrast, one skilled in the art would understand that patients having suffered a myocardial infarction have increased cardiovascular risk factors related to the reoccurrence of adverse cardiovascular events. For example, the American College of Cardiology and the American Heart Association have developed practice guidelines specifically for the treatment of myocardial infarction. ¹ In particular, the ACC/AHA Practice Guidelines specifically outline a "rationale and approach to pharmacotherapy" and steps for "secondary prevention" in the management of patients who have suffered a myocardial infarction. See, for example, pages 1358-1400 of the 1996 Guidelines. Thus, one skilled in the art would recognize that patients having suffered from a myocardial infarction are distinguishable from the general population.

Further, Harrison's actually teaches away from the Examiner's conclusion. In fact, Harrison's supports the Applicants premise that patients having suffered a myocardial infarction are distinguishable from the general population. For example, at page 1066, Harrison's states that a "risk of excess mortality and recurrent nonfatal myocardial infarction persists in patients who recover" from myocardial infarction. Further, at page 1076, Harrison's discusses "postinfarction risk stratification and management" stating that "many clinical factors have been identified which are associated with <u>an increase in cardiovascular risk</u> following initial recovery

¹ <u>See</u>, for example, Ryan et al., "ACC/AHA Guidelines for the Management of Patients with Acute Myocardial Infarction: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Acute Myocardial Infarction)," <u>J Am Coll Cardiol</u> 28:1328-1428 (1996); Ryan et al., "1999 Update: ACC/AHA Guidelines for the Management of Patients with Acute Myocardial Infarction: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Acute Myocardial Infarction," J Am Coll Cardiol 34:890-911 (1999); and Antman et al., "ACC/AHA Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction: Executive Summary: A Report of the ACC/AHA Task Force on Practice Guidelines (Committee to Revise the 1999 Guidelines on the Management of Patients with Acute Myocardial Infarction)," Circulation 110:1-49 (2004).

from a myocardial infarction." As such, "therapy must be individualized depending on the relative importance of the risk(s) present and the degree of benefit to be achieved by specific therapy including revascularization or the use of pharmacologic agents." Accordingly, it is submitted that one skilled in the art would not be motivated to combine the teachings of Harrison's with that of Breivik et al. to arrive at the present invention.

Because the teaching of Breivik et al. is limited to the prevention of hypertension, hypertriglyceridemia and high coagulation factor VII phospholipids complex activity in otherwise healthy patients having undetected moderate hypertension without previous cardiac illness, and patients who have suffered a myocardial infarction are known to have an increased risk of the reoccurrence of adverse cardiovascular events, Applicants submit that the cited references fail to provide any teaching or suggestion regarding reducing the reoccurrence of adverse cardiovascular events in patients who have suffered a myocardial infarction as required by the instant claims. Thus, Applicants submit that a *prima facie* case of obvious cannot be established such that amended claims 12-14, 16-20, 22-25, and 27-28 are patentable over Breivik et al. (U.S. Pat. No. 5,502,077) in view of Harrison's Principles of Internal Medicine. Reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) is requested.

Conclusion

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot by this amendment. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 446-7683.

Applicants do not believe that any fee is required by the timely submission of this response. However, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 08-0750. Further, if there is any other fee deficiency or overpayment of any fees in connection with this patent application, the Commissioner is hereby authorized to charge such deficiency or credit such overpayment to Deposit Account No. 08-0750.

Serial No. 09/869,333 Client Ref No. FC-864/US Attorney Dkt. No. 6794-000141/US/01

Respectfully submitted,

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CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I certify that this correspondence is being deposited with the U.S. Postal Service on August 11, 2005 with sufficient postage as first class mail (including Express Mail per MPEP §512), and addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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